UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

April 30, 2007

In Reply Refer To: WTR-7

Michael Silva, Quality and Production Manager
J & M Anodizing
525 South Flower Street
Burbank, California 91502

Re: September 6, 2006 Clean Water Act Inspection

Dear Mr. Silva:

Enclosed is the April 30, 2007 report for our September 6, 2006 inspection of J&M Anodizing in Burbank, California. Please submit a short response to the findings in Sections 2 through 4 of this report, to EPA, the City of Burbank, and the Regional Water Quality Control Board, by **June 30, 2007**.

The main findings are summarized below:

1 J&M Anodizing qualifies as "zero-discharging" existing source job-shop metal finisher since it generates Federally-regulated process-related wastewaters but does not discharge to the sewers.

2 The local Burbank permit appropriately requires periodic self-certification of no discharge since compliance with Federal standards and local limits is achieved by not discharging to the sewers. Waste manifests should accompany the self-certifications.

3 The potential of an inadvertent or unauthorized discharge to the sewers should be minimized through (1) installing hard-piping that eliminates the need for long hoses, and (2) ensuring all past connections to the sewer are permanently sealed.

I certainly appreciate your helpfulness extended to me during this inspection. I remain available to Burbank and to you to assist in any way. Please do not hesitate to call me at (415) 972-3504 or e-mail at arthur.greg@epa.gov.

Sincerely,

Original signed by:
Greg V. Arthur

Greg V. Arthur
CWA Compliance Office

Enclosure

cc: Kristy Laird, Burbank

U.S. ENVIRONMENTAL PROTECTION AGENCY

REGION 9

CLEAN WATER ACT COMPLIANCE OFFICE

NPDES COMPLIANCE EVALUATION INSPECTION REPORT

Industrial User:	J&M Anodizing 525 South Flower Street, Burbank, California 91502 Zero Discharging Existing Source Job-Shop Metal Finisher (40 CFR 413)
Treatment Works:	City of Burbank Burbank Water Reclamation Plant (NPDES Permit CA0055531)
Dates of Inspection:	September 6, 2006

Inspection Participants:

US EPA:	Greg V. Arthur, Region 9, CWA Compliance Office, (415) 972-3504
RWQCB-Los Angeles:	None
City of Burbank:	Kristy Laird Pickett, United Water, Inspector, (818) 972-1115 ex23 Jeff Carter, United Water, Supervisor, (818) 972-1115 ex17
J&M Anodizing:	Michael Silva, Quality and Production Manager, (818) 842-5149

Report Prepared By: Greg V. Arthur, Environmental Engineer

April 30, 2007

1.0 Scope and Purpose

On September 6, 2006 EPA and the City of Burbank conducted a compliance evaluation inspection of J&M Anodizing in Burbank, California. The purpose was to ensure compliance with the Federal, State and local regulations covering the discharge of non-domestic wastewaters into the sewers under the Clean Water Act. In particular, it was to ensure:

- Classification in the proper Federal categories;
- Application of the correct Federal, State and local standards at correct sampling points;
- Consistent compliance with the standards; and
- Fulfillment of Federal self-monitoring requirements.

J&M Anodizing, located at 525 South Flower Street, would qualify as a categorical industrial user under the Clean Water Act within the Burbank sewer service area if it discharged process-related wastewaters to the sewers. The compliance of J&M Anodizing was assessed through this inspection as part of an on-going EPA evaluation of industrial users in EPA Region 9 by industry sector. The inspection participants are listed on the title page. Arthur conducted the inspection on September 6, 2006.

1.1 Process Description

J&M Anodizing is a metal finishing job-shop that provides anodizing, passivation, and alodine chrome conversion coating of aluminum parts. The operations involve alkaline soap cleaning, nitric-acid deoxidation, hydrochloric-acid desmut, caustic etching, Type I chromic-acid anodizing, Type II sulfuric-acid anodizing, alodine chromium conversion coating, red dye, blue dye, black dye, miscellaneous other dyes, nickel acetate sealing, dichromate sealing, chromic-acid passivation, and non-chrome nitric-acid passivation.

J&M Anodizing does not own the parts it finishes. J&M Anodizing began operations in 1947 and has not significantly changed in configuration over the past 25 years.

1.2 Facility SIC Code

J&M Anodizing is assigned the SIC code for plating, polishing, anodizing, and coloring (SIC 3471) and metals coating (SIC 3479).

1.3 Facility Wastewater Sources

There are no process-related wastewater discharges from J&M Anodizing to the Burbank sewers. There are a number of process-related wastewater spents delivered for off-site disposal as well as one spent and a number of spent static rinses delivered to an evaporator through hard-piping via a standpipe inlet. For the purposes of this report, the tank designation numbers are those identified by J&M Anodizing during this inspection.

Spent Solutions – The imparted contamination from the processing of parts and the progressive drop in solution strength results in the generation of spent solutions. According to J&M Anodizing, spent alkaline soap cleaning solutions are delivered for on-site evaporation. The list of spent solutions follows below.

Baths Generating Spents		Baths Not Generating Spents
T1 - alk soap cleaning ✓ T2 - Type I Cr-acid anodize T3 - Type II H_2SO_4 anodize T5 - nitric-acid deoxidation T25 - HCl desmut T-etch - caustic etch ✓ Evaporated On-site	T27 - alodine Cr conv coat T-red - red dye T-blue - blue dye T-black - black dye T8 - nickel acetate seal T9 - dichromate seal T11 Cr-acid passivation T-pass - non-Cr passivation	None
Hauled Off-site as Hazardous		Regenerated by Adds Only

Rinses – J&M Anodizing employs a limited number of first- or second-stage static rinses. There are no overflow rinses. Spent static rinses are delivered by pump to a standpipe for hard-piped delivery to an on-site evaporator. The list of rinses and washwaters follows on the next page. See the photos depicted in section 1.5 of this report.

Rinses Not Discharged		Rinses Discharged
T4 - 1° static for T1/3/5/25 T6 - 2° static for T1/3/5/25 T7 - 3° hot DI for T1/3/5/25	T18 - 1° static for T27 T* - numerous statics in barrels	None
Evaporated On-Site		Discharged to the Sewers

Residuals – According to the Production Manager, J&M Anodizing hauls off-site for disposal as hazardous most spent solutions, evaporator slurries, generated tank bottom sludges, floor grime and debris. DI columns are serviced off-site by the vendor. No other residuals are generated on-site because J&M Anodizing provides no chemical treatment or preconditioning of any spent solutions or spent static rinses.

Secondary Containment - J&M Anodizing apparently also appropriately keeps the secondary containment dry. On the day of this inspection, no drainage was found impounded within the secondary containment curbing.

1.4 Facility Process Wastewater Handling

J&M Anodizing is configured and operated to not discharge process-related wastewaters to the sewers and as a result does not provide any wastewater treatment beyond the evaporation of spent alkaline cleaners and spent static rinses. J&M Anodizing asserts that all other spent solutions, secondary containment drainage, evaporator slurries, and debris are hauled off-site for disposal as hazardous. Also ***see*** the photos on the next page in section 1.5 of this report.

Composition - The process wastewaters listed in section 1.3 above would be expected to contain copper, chromium, lead, nickel, zinc, and acidity, as well as oil & grease, salts, surfactants, and other pollutants in the surface grime cleaned off of parts.

Delivery - J&M Anodizing uses a portable pump and hosing to deliver spent alkaline solutions and spent rinses to a standpipe and hard piping leading to the 600 gallon influent holding tank for evaporation. J&M Anodizing also uses the portable pump and hosing to deliver the other spents to totes positioned at the bay door for off-site hauling as hazardous.

Evaporation - Spents and spent rinses are reduced in volume through use of an evaporator.

1.5 Photo Documentation

Four of the seven photographs taken during this inspection are depicted below and saved as *jmanodize-1.jpg* through *jmanodize-7.jpg*. The photos not depicted here were duplicates.

Photo: Delivery inlet into the line leading to evap
Taken By: Greg V. Arthur
Date: 09/06/06

Photo: Evaporator and EQ for spent alkalines
Taken By: Greg V. Arthur
Date: 09/06/06

Photo: Totes with spent anodizing solutions
Taken By: Greg V. Arthur
Date: 09/06/06

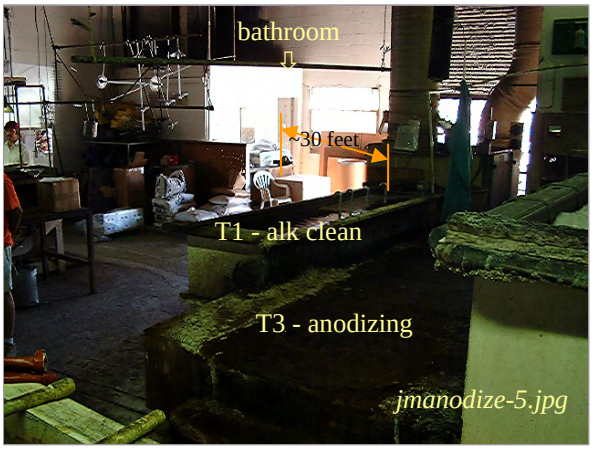

Photo: Proximity to the bathroom connection
Taken By: Greg V. Arthur
Date: 09/06/06

1.6 POTW Legal Authorities

The City of Burbank – Burbank operates a wastewater treatment plant, which discharges to the Los Angeles River, and an approved pretreatment program, as required by the State of California in the Los Angeles RWQCB's Waste Discharge Requirements, No. R4-2006-0085, reissued to Burbank in 2006 and serving as NPDES Permit No. CA0055531. Burbank has established a sewer use ordinance that applies to all industrial users within its city limits. Under this authority, Burbank issued industrial user permit No.1018 authorizing discharge of only domestic wastewaters from J&M Anodizing to the sewers.

1.7 Sampling Record

There are no compliance samples since J&M Anodizing is not authorized to discharge under the Burbank industrial user permit No. 1018.

2.0 Sewer Discharge Standards and Limits

Federal categorical pretreatment standards (where they exist), national prohibitions, State groundwater, and the local limits (where they exist) must be applied to the sewered discharges from industrial users. (40 CFR 403.5 and 403.6).

Summary

No Federal categorical pretreatment standards, national prohibitions, or local limits apply because there are no process-related wastewater discharges to the sewers. However, J&M Anodizing does generate wastewaters that if discharged would be regulated under the Federal job-shop electroplating standards, the national prohibitions, and the local limits. The application of Federal standards, national prohibitions, and local limits was determined through visual inspection.

Requirements

- None.

Recommendations

- The Burbank permit should also list the Federal standards that would apply if process-related wastewaters were discharged to the sewers.

2.1 Classification by Federal Point Source Category

J&M Anodizing would qualify as an existing source job-shop metal finisher subject to the Federal standards in 40 CFR 413, if its process-related wastewaters were discharged to the sewers. J&M Anodizing would not qualify as a new source metal finisher because it began operations before the August 31, 1982 promulgation date of the metal finishing rule for new sources in 40 CFR 433. No process would qualify under any other Federal rule in 40 CFR 407-471.

2.2 Local Limits and National Prohibitions

Local limits and national prohibitions would apply to any discharge of the process-related wastewaters generated on-site. Local limits and national prohibitions are meant to express the limitations on non-domestic discharges necessary to protect the sewers, treatment plants, treatment plant sludges, and their receiving waters from adverse impacts. Generally, technically-based numerical local limits supplant national prohibitions.

2.3 Federal Categorical Pretreatment Standards
Existing Source Job-Shop Electroplating - 40 CFR 413

40 CFR 413	Cd	Cr	Cu	Pb	Ni	Ag	Zn	CNt	CNa	TTO	TM
daily-maximum (mg/l)	**1.2**	7.0	4.5	**0.6**	4.1	-	4.2	1.9	**5.0**	2.13*****	10.5
four-day average (mg/l)	**0.7**	4.0	2.7	**0.4**	2.6	-	2.6	1.0	**2.7**	-	6.8
stat conversion to mo-avgs	**0.5**	2.5	1.8	**0.3**	1.8	-	1.8	0.55	**1.5**	-	5.0
bold - the only standards that apply if the discharge is <10,000 gpd / ***** TTO **4.57** mg/l											

Applicability - The Federal job-shop electroplating standards apply to job-shop metal finishers that do not own more than 50% of the parts processed and were in operation in their present configuration before the August 31, 1982 proposal date of the Federal metal finishing rule. The job-shop electroplating standards in 40 CFR 413.44(b)(f), and 413.54(b)(f) would apply to any discharges of under 10,000 gallons per day of process wastewaters from J&M Anodizing to the sewers.

2.4 Pollutants of Concern

There are no pollutants of concern as long as J&M Anodizing does not discharge its process-related wastewaters. The pollutants of concern would comprise those regulated by the Federal existing source job-shop electroplating standards (*cadmium, lead, amenable cyanide, TTO*), national prohibitions (*pH*), and certain local limits for which there is a potential to exceed the local limits (*chromium, copper, nickel, zinc, total cyanide, pH*).

2.5 Compliance Sampling

There are no identified process-related wastewater discharges to the sewers. As a result, there are no sampling points for the non-domestic wastewaters.

3.0 Compliance with Federal Standards, National Prohibitions, and Local Limits

Industrial users must comply with the Federal categorical pretreatment standards that apply to their process wastewater discharges. 40 CFR 403.6(b).

Categorical industrial users must comply with the prohibition against dilution of the Federally-regulated waste streams as a substitute for treatment. 40 CFR 403.6(d).

Industrial users must comply with the provision restricting the bypass of treatment necessary to comply with any pretreatment standard or requirement. 40 CFR 403.17(d).

All non-domestic wastewater discharges to the sewers must comply with local limits and the national prohibitions. 40 CFR 403.5(a,b,d).

Summary

J&M Anodizing achieves compliance with the Federal standards for existing source job-shop metal finishers by not discharging the Federally-regulated process-regulated wastewaters to the sewers. J&M Anodizing accomplishes "zero-discharge" compliance through the collection and off-site hauling of all generated wastewaters. J&M Anodizing appropriately maintains the under-flooring within secondary containment dry and uses built-in hard piping to deliver certain spents and spent rinses to the evaporator. In these ways, J&M Anodizing also ensures compliance with the national prohibitions and local limits that would apply to discharges. However, the use of a portable pump and long hoses to transfer between tanks or to deliver to the totes for off-site disposal makes it physically possible for an inadvertent or unauthorized discharge of process-related wastewaters to the sewers.

Requirements

- None.

Recommendations

- J&M Anodizing should eliminate the possession on-site of long hoses currently used in the transfer and delivery of solutions and wastewaters throughout the facility.
- Hard piping from the tanks generating spents to the area near the back bay door would ensure the transfer and delivery of spents to only the totes for off-site hauling.
- Old sewer connections and piping should be verified as permanently sealed and removed.

3.1 National Objectives

The general pretreatment regulations were promulgated in order to fulfill the national objectives to prevent the introduction of pollutants that:

(1) cause operational interference with sewage treatment or sludge disposal,
(2) pass-through sewage treatment into the receiving waters or sludge,
(3) are in any way incompatible with the sewerage works, or
(4) do not improve the opportunities to recycle municipal wastewaters and sludge.

This inspection did not include an evaluation of whether achievement of the national objectives in 40 CFR 403.2 have been demonstrated by the Burbank wastewater treatment plant through consistent compliance with their sludge and discharge limits.

3.2 Compliance with Standards and Limits

J&M Anodizing is configured and operated to comply with Federal standards and local limits strictly through the proper handling of spents, rinses, and residuals by the shop operators. There is no on-site treatment of wastewaters for discharge to the sewers, although the alkaline spents are evaporated on-site, and the secondary containment is kept dry. As a result, full compliance depends on the successful and consistent delivery of spent solutions, and residuals including evaporator sludges and tank bottoms, from the tanks into totes for hauling off-site as hazardous. Any inadvertent or unauthorized discharge of any process-related wastewaters of any quality to the sewers would violate the local limits as expressed in the Burbank permit as a narrative prohibition against discharge. Any inadvertent or unauthorized discharge likely would also violate the numerical Federal standards and local limits since wastewaters are not treated to remove metals or adjust the pH.

The Production Manager stated that J&M Anodizing uses portable pumping to transfer solutions and wastewater. This means that there must be at least one portable pump outfitted with fittings and a hose extension long enough to deliver the contents from tanks throughout the shop to the totes near the back bay door, as well as from the alkaline cleaning tank and static rinse tanks to the delivery inlet for evaporation. Consequently, the portable pump and hosing is long enough to reach to the bathroom sewer connection since the bathroom is also located near the back bay door. It would be better to deliver all spents in the same way that alkalines and spent rinses are delivered to evaporation - through a hard-plumbed line, with stand-pipe inlets in shop, leading to the area near the back bay door. This would not preclude the use of the portable pump, but it would eliminate the need for long hose lengths. Maintaining only short hose lengths prevents the inadvertent or unauthorized delivery of spent solutions to improper disposal points. ***See*** the photos in section 1.5 of this report.

3.3 Dilution and Bypassing

The Federal standards in 40 CFR 403.6(d) and 403.17(d) prohibit “dilution as a substitute for treatment” and “bypassing any treatment necessary to comply with standards. There is no possibility to violate the prohibition against dilution as a substitute for treatment since J&M Anodizing does not provide wastewater treatment nor discharge wastewaters to the sewers. On the other hand, an inadvertent or unauthorized discharge to the sewers would violate the prohibition against bypassing since compliance with Federal standards and local limits is achieved through the capture and off-hauling of all wastewaters.

4.0 Compliance with Federal Monitoring Requirements

Significant industrial users must self-monitor for all regulated parameters at least twice per year unless the sewerage agency monitors in place of self-monitoring. 40 CFR 403.12(e) & 403.12(g).

Each sample must be representative of the sampling day's operations. Sampling must be representative of the conditions occurring during the reporting period. 40 CFR 403.12(g) and 403.12(h).

Summary

J&M Anodizing does not qualify as a significant industrial user since it does not discharge its Federally-regulated wastewaters to the sewers. As a result, it is not necessary to for Burbank to issue a permit with self-monitoring requirements. However, since J&M Anodizing achieves compliance with the Federal metal finishing standards, national prohibitions, and local limits through zero-discharge practices, it is appropriate that Burbank has issued a "zero-discharge" permit that substitutes a written certification of no discharge in lieu of semi-annual self-monitoring. The 2006 waste manifests listed the deliveries to U.S. Ecology in Beatty, Nevada of sulfuric acid, and tank bottom sludges. These manifest could but do not necessarily account for the types of wastewaters expected to be generated by J&M Anodizing. In particular, the 2006 manifests did not list and deliveries of chromium-bearing spents from Type I anodizing, alodining, dichromate sealing, or passivation.

Requirements

- None.

Recommendations

- The semi-annual self-certification statements should include copies of the hazardous waste manifests documenting the off-hauling of spents, spent static rinses, drainage, and residuals.